The Deste or and the sea of the s



VOLUME SEVENTEEN

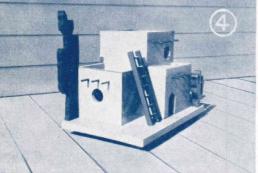
Issue No. 1, 1947, '48

FIFTEEN CENTS



- * BLACK BOARD
- * BOOK SHELVES
- * GAMES * DESIGNS











With DELTA CRAFTERS



☆ The coffee table (photo No. 1) was designed by Mr. A. H. Souerwine of York, Pennsylvania to match the drum table published in our book "40 Fine Tables." This table also matches three others he made some time ago.

☆ Mr. Torchin of La Salle, Illinois made the toy kitchen cabinet (photo No. 2) which appeared in Issue No. 3, Vol. 15 of the Deltagram for his little sister. He expects to make a lot of these to sell at Christmas time.

☆ Photos No. 3 through No. 7 are some of the projects made by D. R. McLean of Dunlap, Iowa. The two photograph albums with the scrolled lettering contain pictures of the time he spent in the service.

The Deltagram

* A MAGAZINE FOR CRAFTSMEN

PUBLISHED BY THE DELTA MANUFACTURING COMPANY, MILWAUKEE, WISC. SOLD ONLY BY SUBSCRIPTION - 75 + THE YEAR.

★ E. G. HAMILTON - MANAGING EDITOR

A. M. WARKASKE - TECH. EDITOR

VOLUME SEVENTEEN

Issue No. 1, 1947, '48

FIFTEEN CENTS



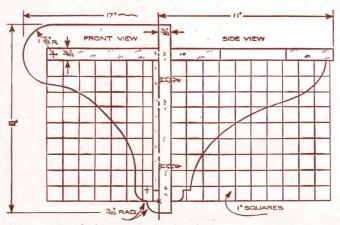


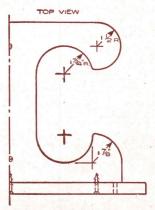


This handy rack may be band sawed from any 34" plywood scrap. It comes in very handy for hanging waders or hip boots so that they may drain and air out in order to prevent deterioration of the rubber.

The drawing below shows squared pattern with complete dimensions. Fasten together with screws and seal with several coats of shellac. Then fasten to the inside of your closet door or the wall if you prefer.

Build a Rack for Your HIP BOOTS or WADERS









RECORD CABINET

The cabinet shown above was built to match the Philco radiophonograph combination. The curved design in the front of the radio cabinet was carried out in the door design on the cabinet below. Complete plans are shown on the following page.

The door was built up from solid material glued together and then shaped by hand with plane and sander. The door is hinged as shown in the drawing, and for the door catch a Glynn Johnson invisible catch is recommended.

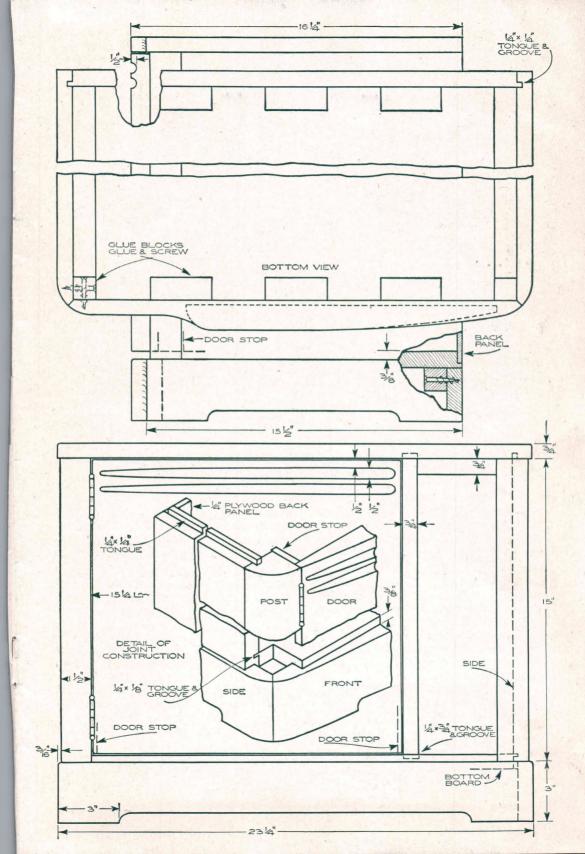
The base is assembled as a unit and then screw fastened to the bottom of the cabinet as shown in Photograph No. 2. Grooves to match the grooves in the front of the radio cabinet were run in the record cabinet door on the shaper, making use of a special ground moulding knife providing a half-round cutting surface. These grooves may be left out if you do not wish to go to this much trouble. The opening on the right of the cabinet provides space for a few selected albums of your choice records. The remainder of the space is enclosed behind the door and may be left blank or partitioned if you desire.

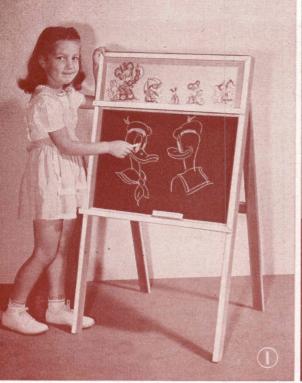
The finish should match the radio cabinet if you already have one. The original was finished in two-tone walnut stain and spar varnish.













An Easily Built BLACKBOARD FOR YOUNG STUDENTS

Here is a simple yet popular project which you can build for the younger members of the family. A blackboard is always interesting and educational for the children. This one may be built from pine or any other lumber you may have on hand. Complete details of the framing and its construction are shown in the drawing on the next page.

The bottom tray is cut out on the circular saw as shown in the detailed drawing. A guide fence is clamped to the saw table and the tray stock is then passed over the circular saw blade at an angle of 26°. Groove is then sanded to smooth the surface. The back of the support frame

is assembled with dowels and glue and it is hinged to the back of the top frame as shown in the drawing. This back frame thus folds flat against the blackboard for easy storage.

The blackboard itself may be made from ¼" pressed wood panel over which a coating of flat black slating paint is applied. The panel is set in the

frame and the corners are finished off on the front side with 3%" quarter round moulding. The blackboard frame should be finished with colorful enamel and appropriate decals or A, B, C decals may be placed in the upper section as shown in the photo above if preferred.

BILL OF MATERIAL-

FRONT SECTION
2 sides34 x 134 x 44
1 top
1 top shelf34 x 134 x 24
1 bottom shelf3/4 x 3 x 24
1 blackboard
2 moulding strips3% x 3% x 16
3 moulding strips 3% x 3% x 221/2
2 moulding strips 3/8 x 3/8 x 93/4
BACK SECTION
2 sides34 x 134 x 44
1 top
1 center brace
8 dowels
2 hinges nails
1 eraser (wood)3/4 x 13/4 x 4
1 felt pad

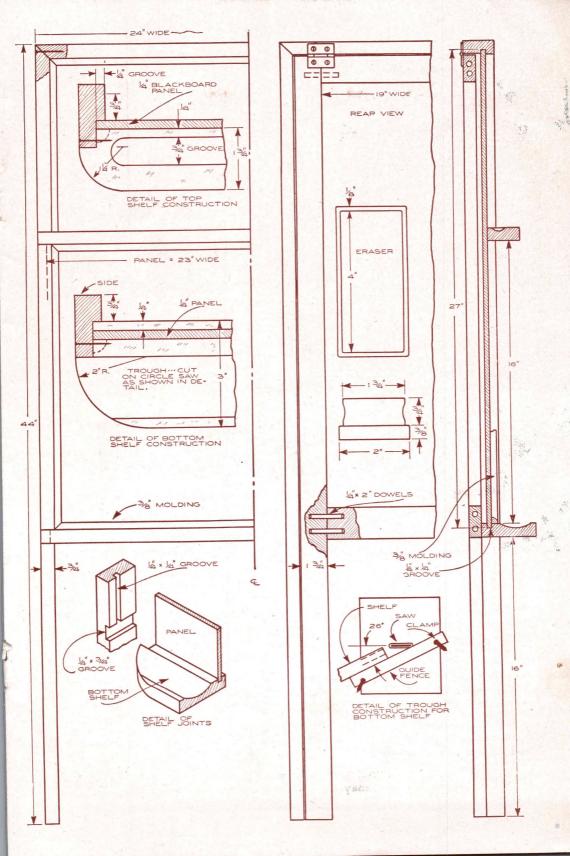








Photo No. 1 shows an old double bed which was remodeled to make two single beds like the ones shown in Photo No. 2.

The twin beds shown in Photo No. 3 at left contain very little new lumber. The side boards and cleats along the sides are the only new stock used.

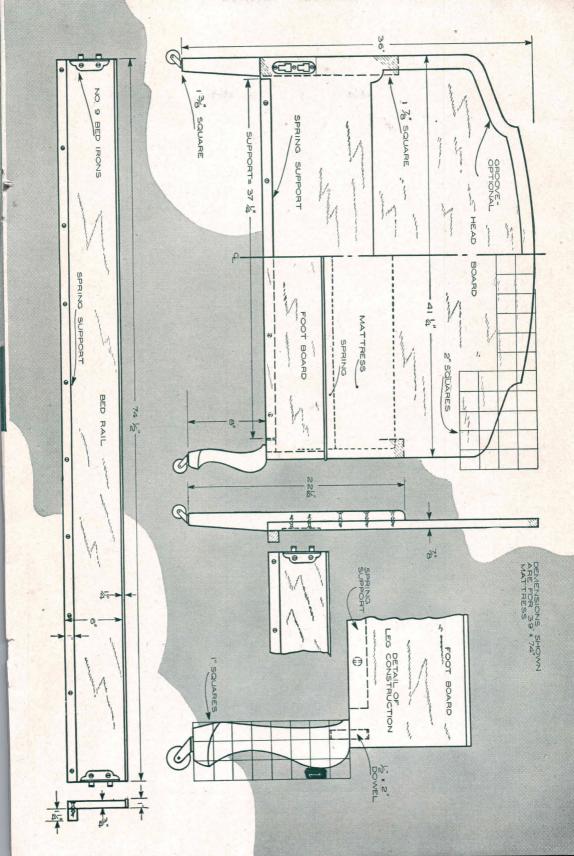
Build HOLLYWOOD TWIN BEDS

☆ The beds shown in the photographs above were built from the old double bed shown in Photo No. 1. There is enough material in the head and foot board of the old bed to make head boards in the new set shown in Photo No. 3.

You will notice also in Photo No. 1 that there were four shaped legs on the foot board which were split up to make two pair for the new set. The four side boards were made from new lumber which was later finished to match the head boards. The two foot boards were made from the old side rails.

The drawings shown on the following page are complete so that you may start with all new lumber and construct the same set, should you not have a bed similar to the one shown in Photo No. 1.

The finish of the original was dark walnut. However, if you build from entirely new lumber you may use either light or dark wood to match your own furnishings.



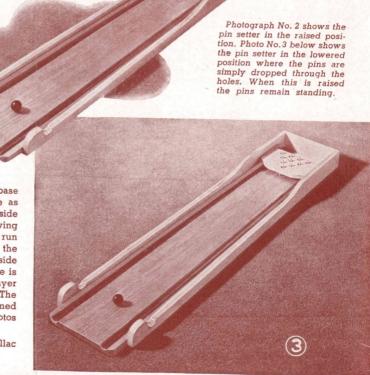


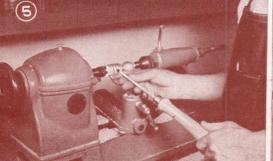
should be hardwood. although pine will make up equally as well.

The base is made from one 3/4" board in which the two

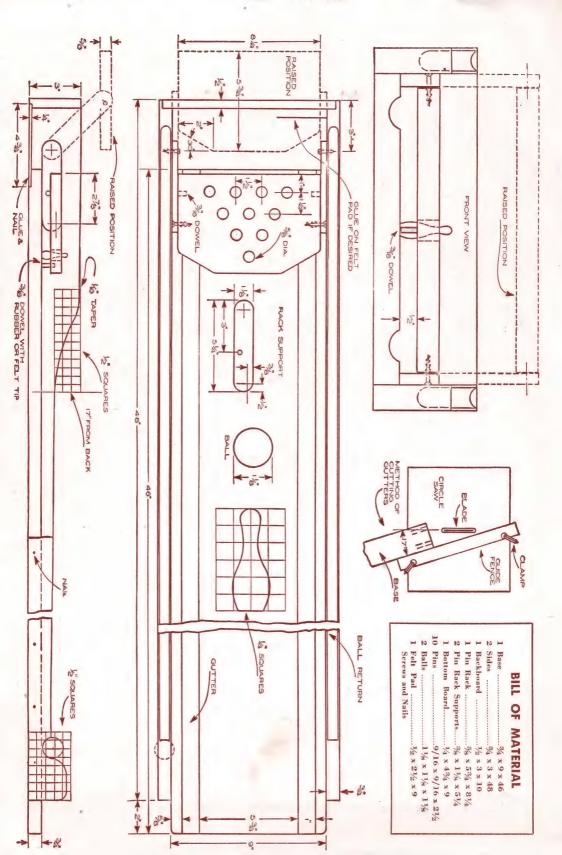
gutters are cut by running the base across the circular saw at an angle as shown in the detailed drawing. The side rails are cut as shown in the drawing and a half-round groove may be run along the top edge for returning the bowling ball to the player. This side rail is slanted so that after the groove is cut the ball will roll back to the player when released from the other end. The bowling pins and the ball may be turned out on the lathe as shown in Photos No. 4 and 5.

The finish should be white shellac and good spar varnish.













An Attractive COLONIAL WALL CABINET

☆ Here is an extremely attractive wall shelf with a mirror back which gives the impression of twice the actual depth when viewed as shown in the photograph above. The frame is constructed as shown in the drawing on the next page, and the mouldings are run on either the shaper or the mould-

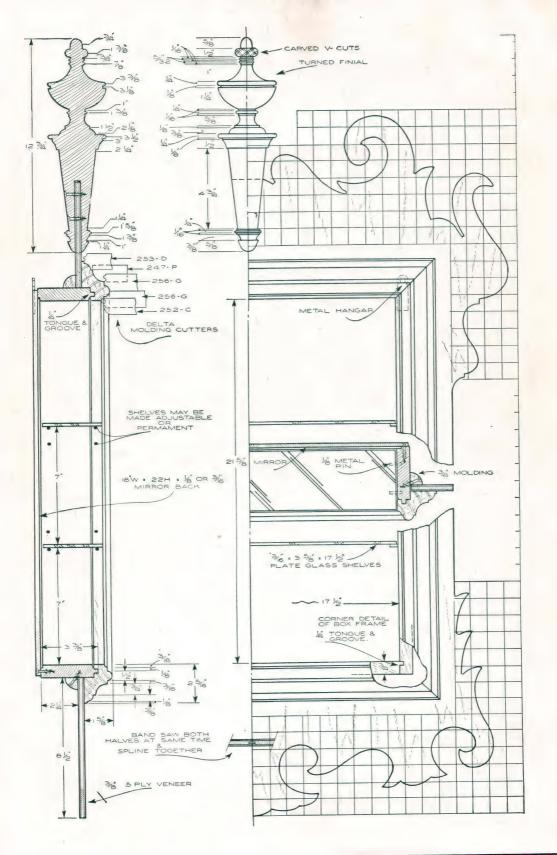
ing head and the circular saw. The mouldings are mitered at the corners and assembled around the front edge of the frame. The plywood outer frame is scroll sawed from two pieces of 3/8" plywood. These two pieces are butted' together at the center line of the cabinet. This plywood frame is placed back of the mouldings and held in place with quarter-round moulding as shown in the drawing detail.

The top finial turning is turned on the lathe, after which a slot is cut in the lower half which slips over the 3/8" plywood frame. 1/8" metal pins are

used to support the two plate glass shelves. The mirror is then inserted in the back and covered with a plywood panel backing. The lumber which was used in the original was all birch and the finish natural with two coats of white shellac and spar varnish.

BILL	OF	MAT	ER	14	AL.
wwood f	nont		34	-	29

DILL OF	MAIERIAL
1 plywood front _	3/8 x 32 x 42
2 sides	3/4 x 3 3/8 x 23 1/8
1 top	3/4 x 3 3/8 x 18
1 bottom	3/4 x 3 3/8 x 18
1 back panel	1/4 x 19 x 23 1/8
2 molding strips	15% x 2-5/16 x 221/4
2 molding	1/8 1 2-0/10 1 22-74
strips	15% x 2-5/16 x 261/4
2 molding strips	34 x 34 x 201/2
2 molding strips	3/4 x 3/4 x 245/8
1 turned	
	3 % x 3 % x 12 %
1 mirror 1/8	or 3/16 x 18W x 22H
2 glass shelves	_3/16 x 35% x 17½
2 metal hangers	

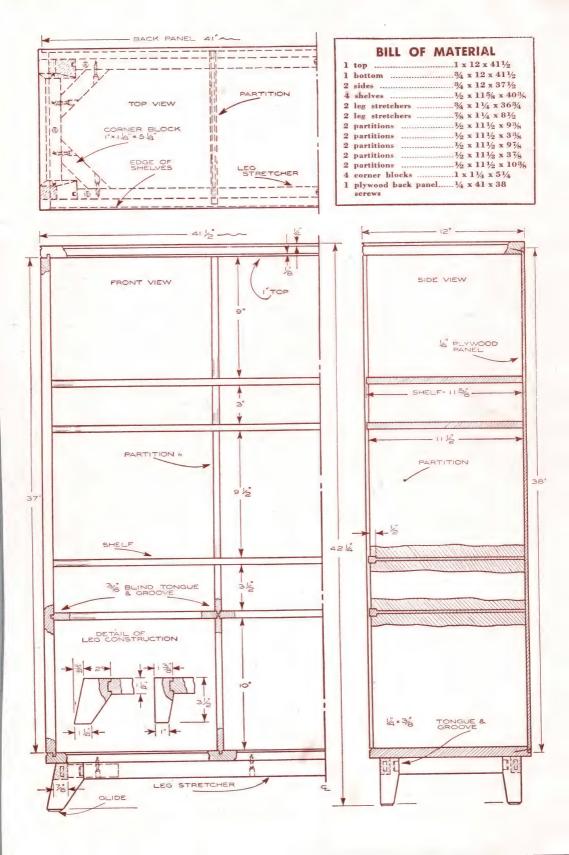




The shelves and partitions are all constructed and assembled by using blind front tonque and groove joints. The back is plywood panel 1/4" thick, rabbetted in flush with the back surface. The base is assembled with mortise and tenon joints and is screw fastened to the bottom of the book shelves. The entire project is built from birch lumber and finished natural.

BOOK SHELVES that are BOTH MODERN and PRACTICAL

These book shelves provide a very practical place to keep the various sizes of books and magazines which collect around the average home. Thin books of the large size hardly ever fit into the ordinary book shelves. Magazines which have no hard binding are almost impossible to store in a vertical position and still look neat. This book shelf provides flat spaces between the regular shelves for such material. The height of the shelves have also been varied to provide for the various heights of the different books. By using part of the spaces for knick-knacks as shown in the photograph above the book shelves make a very attractive wall unit for the home.



NESTED COFFEE TABLES

In Natural Mahogany





structed from straight-grain mahogany.

Legs are cut and tapered and assem-

Here is a set of nested tables which is different in design from the usual run of furniture. The two smaller tables pull out from either end as shown in Photo No. 2. These two smaller tables. in addition to providing almost twice

as much table room have an additional lower shelf for magazines, etc. These lower shelves are possible in the design since they do not interfere when the tables are nested. The shelves also may be used when the tables are in any position.

The original set of tables was conbled to the side rails with glue and dowels. A partition is placed in the center between the side rails of the large table so that the smaller tables

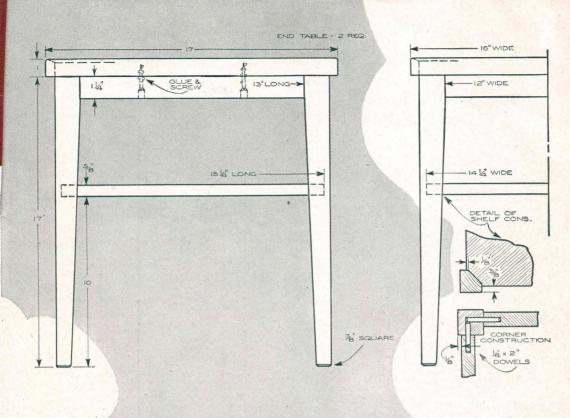
cannot be pushed beyond the center of BILL OF MATERIAL CENTER TABLE the line. (See drawing for details.) 1/2" x 1" moulding forms the rails on all three tables. This rail provides a 3/16" well in the table top which may be used for glass

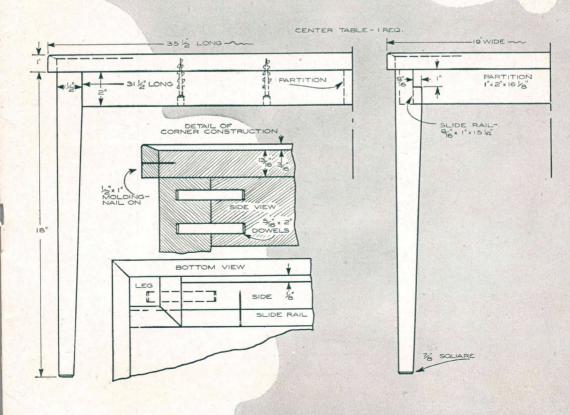
> The tables were attractively finished in mahogany.

if you like.

1	tep13/16 x 18 x 341/2
2	molding strips ½ x 1 x 19
2	molding strips 1/2 x 1 x 35 1/2
4	legs
2	side frames13/16 x 2 x 311/2
1	partition1 x 2 x 161/8
4	slide rails9/16 x 1 x 151/4
12	5/16"x 2" wood dowels
	No. 11 2" F.H. wood screws
	END TABLES

	END TABLES
2	tops13/16 x 15 x 16
4	molding strips ½ x 1 x 17
4	molding strips 1/2 x 1 x 17
4	end frames13/16 x 11/4 x 12
4	side frames13/16 x 11/4 x 13
	legs
2	shelves
	Screws
32	1/4"x 2" wood dowels
16	No. 11 11/4 F.H. wood screws





Working Plastic With Power Tools

Orinda, California-Now that things are somewhat normal, there will be a great field in plastics for the home craftsman to explore. In my own case, I am very much concerned over the limitations of my present Delta tools for working in plastics.

My present equipment consists of (All Delta) an eight-inch saw, multi-speed scroll saw, drill press, and lathe. I hope to be able to buy a jointer and band saw when these are available, and also a grinder.

I think the Deltagram should have some information on the following questions in future issues.

Can the thermoplastics be turned on the lathe the Can the thermoplastics be turned on the lathe the same as wood? Is it practical to cut plastics on the circular saw? What is the proper blade and speed to get the best results? One more thing in connection with working clear plastics, like Lucite or Plexiglas, is knowing how to finish and polish the projects made of this metasial. They contains of this material. They scratch very easily, which makes it hard to get a clear finish. How do you polish cut surfaces? What materials are necessary. I thought several articles using plastics if they appeared from time to time in the Deltagram could cover some of the gravities received. of the questions mentioned above.

> We expect to feature plastic products which will bring out the working prob-lems asked by H. K. Watch for these in the coming issues.

Duplicator For Boat Hulls

Baltimore, Md .- We have in the past used a number of your power tools in roughing out hulls of ship models.

At present we have plans to put a sailing vessel on the market of approximately forty inches in length-complete, ready to sail.

We have put "Sets" out using the old "bread and butter" type of construction and wish to use this same construction now on this completed boat.

Our problem now is to do away with the hand carving necessary after the numerous sections of the hull are glued together.

We now have a light duplicator equipped with a high-speed motor which does carving work very well on very small parts. A machine of this type of a heavier construction for larger work should do the job.

Can you tell us where we might get a machine of this type that will handle a piece of work to duplicate from a master pattern?

> Here is a list of a few machinery manufacturers who make duplicate carvers and high-speed routers.

> Oliver Machinery Co., Grand Rapids,

Onsrud Machinery Works, Inc., 3902 Palmer St., Chicago, Ill.

Drilling Holes in Glass

Detroit, Michigan-I am interested in making some glass lamps and novelties which require holes in the bases for lamp cords. I am also using glass strips in my recreation room. My trouble is in trying to drill 3% holes in these glass strips.

In your book "21 Lovely Lamps" you mention to

use 80-grit silicon carbide powder and a brass tube for drilling holes in glass. Is this the only way to grind or make 3/8" holes? If so, can you tell me where I can get the silicon powder?

Drilling of glass can be done very Drilling of glass can be done very easily on the drill press with a brass or copper tube cut square on the end and then slotted or notched. Support the work on a flat piece of wood, felt, or rubber. A dam of putty is built around the place where it is to be drilled. With a mixture of silicon powder and machine oil or turnetting in the well and the control of the state of the stat turpentine in the well and running the press at a slow speed very good results can be obtained in drilling glass in this manner. For further details refer to our Drill Press and Abrasive manuals.

A Few Shop Hints

Los Angeles, California—Here are a few shop hints for your "Flying Chips" page which I found very useful.

In sanding cylindrical inside diameters I use a dowel with a narrow saw cut about two and one-half inches in one end into which I fold a double thickness of garnet cloth. This chucked in the drill press and in no time I have a smooth finish. The folded length of garnet cloth should be twice the inside diameter to be sanded.

To hold finer tolerances with my dado set I have made washers of shim stock which I insert between the chippers to bring the width of the cut to within

At times an edge belt sander is more satisfactory than either an ordinary belt sander or a disc sander. Having a portable belt sander, I constructed a jig to hold it on its side. To keep the switch on I use a wedge. This setup is handy for sanding narrow boards and beauty them then the size of the sanding narrow without the size of the sanding narrow boards. and keeps them perfectly square, without the circular sanding marks which result when using a disc sander on long stock.

Due to the limited space available in my garage workshop, I mount all my machines on casters, Bassick is one manufacturer who makes the locking type casters which are necessary in order to keep the machine from moving while in operation. A five or six rubber-tired caster of the type used in hospital and restaurant equipment is quite satisfactory.

I have my circular saw and jointer mounted on separate stands with the tables of both at the same height. Thus I have a fine extra table for use in cutting or planing extra long stock. Also I can place the tools side by side and connect the two stands by means of a pair of 1 x 4 x 4' boards which are drilled every six inches to take the bolt for attaching to the jointer. This way I can use the fence of the jointer in cutting plywood. Six-inch adjustments are made with the boards and exact width is obtained by adjusting the jointer fence. This is a great help as cutting a sheet of plywood is usually a difficult task.

I had great success in making and selling the Doll High Chair (Vol. 13, Issue No. 2, Nov. Dec., 1943 Deltagram) and the elephant in your "Toys, Games, Playground Equipment." Sales of these items alone more than paid for all my equipment and time.

How About Bait Casting Plugs

Sheridan, Indiana—Recently while reading your book Page 10, Making Money With Delta Tools, I noticed a paragraph on bait easting plugs.

I believe this would make an interesting project for any small workshop like my own equipped with several Delta Machines.

If you have any plans for the above available, I would like to purchase several designs. If not, where can I get these?

Unfortunately, we do not have designs on bait casting plugs. We think it would be a good project for some future issue of the Deltagram. In the meanting we would suggest our readmeantime, we would suggest our readers write to some of the home craft magazines on the above subject.

Sound-Deadening a Workshop

Cleveland, Ohio-I have been referred to you on the subject of "Sound Deadening."

My hobby is woodworking, and I am anxious to set my shop up in an attic. I am the owner of a two-story flat. The tenants who live on the second floor would not mind the noise, but I believe the neighbors might.

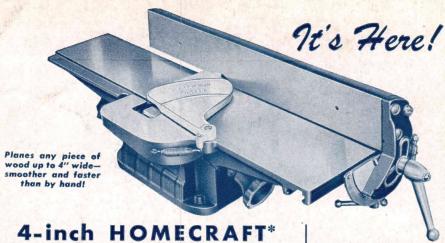
I know that the machines do throw off a lot of noise, especially at night when everything is quiet. Are you able to supply me with definite information on sound-proofing a workshop?

We suggest that you write to The Celotex Corporation of Chicago 3, Illinois for obtaining information on the above subject.

DESIGNS

These are full size drawings which can be easily traced directly on the material to be cut. Paint the material with a flat coat of paint before drawing the design.





4-inch HOMECRAFT* JOINTER

that gives you accuracy, convenience, safety

A big, husky machine you're proud to own

- Cuts 1/4" rabbets.
- Super-safe guard covers knives completely.
- Cutterhead runs on lubricatedfor-life ball bearings.
- Fence moves entire width of table – pivots 45° to and 45° away from cutting knives.
- Tables are individually adjustable for proper cut.

New Delta Flexible Tool Shaft

for Quick - Easy - Economical Work

Here are a few of its many operations...

Grinding — Polishing — Buffing — Deburring — Sanding — Routing — Finishing — Filing Shaping—Reaming—Drilling—Rubbing—Hole Cutting—Sawing—Power Transmission, etc.

A real multiple use tool for the home workshop. It can be attached to your bench mounted motor or portable power unit — or to the open end of any motor used on your machine tools. Must be run clockwise.

Comes in two lengths: 5 feet and 6 feet, with a ½" or %" motor connector. 5' Flexible Shaft \$15.00, 6' Flexible Shaft \$16.50

FLEXIBLE SHAFT must be run clockwise.



Printed in the U.S. of A.



DELTA MANUFACTURING DIVISION

ROCKWELL MANUFACTURING COMPANY
MILWAUKEE 1, WISCONSIN

General Sales Office

6 NORTH MICHIGAN AVENUE, CHICAGO 2, ILLINOIS